

## LED CURING APPARATUS AND METHOD

### Abstract

5 A radiation curing apparatus comprises a plurality of solid state radiation sources to  
generate radiation that cures a first material. The solid state radiation sources can be disposed  
in an array pattern. Optical concentrators, arranged in a corresponding array pattern, receive  
radiation from corresponding solid state radiation sources. The concentrated radiation is  
received by a plurality of optical waveguides, also arranged in a corresponding array pattern.  
Each optical waveguide includes a first end to receive the radiation and a second end to output  
10 the radiation. The curing apparatus can be utilized for continuous substrate, sheet, piece part,  
spot curing, and/or 3D radiation-cure processes.